

REMARKS

Claims 1 and 4-15 are pending in the present application. Claims 13 and 15 are withdrawn. Claims 1, 4, 6 and 14 are herein amended. Claim 3 is canceled.

Claim Rejections – 35 U.S.C. § 112

Claim 6 was rejected under 35 U.S.C. § 112. The Office Action stated that the following claim 6 limitation lacks an antecedent: “the incident regions” in line 4. Claim 6 has been amended for clarification. Support for the amendment is in the specification at, *e.g.*, page 10, lines 2-14.

Withdrawal of the § 112 rejection is requested.

Claim Rejections – 35 U.S.C. §§ 102 and 103

Claims 1, 3-5, 7, 9, 10 and 14 were rejected under 35 U.S.C. § 102(e) as being anticipated by **Hong** (US 7,365,729); claims 6, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Hong** in view of **Lim** (US 7,053,880); and claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over **Hong** and **Lim** in view of **Sato** (US 7,030,848).

Favorable reconsideration is requested.

The present specification describes that “it is an object of the present invention to provide a display device and display method capable of reducing power consumption without causing deterioration in the displayed image quality, particularly a decrease in brightness.” (Specification, page 5, lines 19-22.)

The Specification explains with Fig. 3 the concept of a conventional field-sequential type display device, and explains with Fig. 4 the concept of a field-sequential type display device

according to the present invention, in order to show the differences. (Specification, p. 7, lines 3-23.)

The Specification describes features and advantages according to the present invention:

when performing display by a field-sequential method by successively causing lights of a plurality of colors to be incident on the display element from a light source and synchronizing the switching of light to be incident on the display element with the light control (switching) in the display element based on display data of each color corresponding to an image to be displayed, the grayscale level of display data corresponding to a color of light incident on the display element is detected, and the intensity of light incident on the display element and the light control variable (switching variable) in the display element are adjusted based on the detection result. It is thus possible to adjust the intensity of incident light and the light control variable according to display data. For display data that does not require the brightest display, by reducing the intensity of light incident on the display element and adjusting the light control variable to increase the transmittance or reflectance of incident light on the display element, it is possible reduce the power consumed by the light source while maintaining a screen brightness equivalent to that obtained without adjusting the intensity of incident light and the light control variable.

(Specification, page 6, line 7 to page 7, line 1.)

Furthermore, the Specification describes the following embodiment according to the present invention:

- “The image data PD for display is inputted to the grayscale level detection circuit 23 from the personal computer, ... the image memory 30 outputs the image data PD pixel by pixel,” (specification, page 19, lines 6-12);
- “Based on the grayscale level signal GL from the grayscale level detection circuit 23 ..., the intensity of light incident on the liquid crystal panel 21 as a display element

from the back-light 22 as a light source and the light control variable (switching variable) in the liquid crystal panel 21 are adjusted,” (specification, page 18, line 23 to page 19, line 4);

- “According to the output of the signal from the data driver 32 and the scanning by the scan driver 33, ... controlling the intensity of transmitted light of the pixels. The transmittance at this time is adjusted based on the grayscale level of the image data,” (specification, page 20, lines 2-7); and
- “Based on the above-described concept of the present invention shown in FIG. 4, the grayscale levels of the red, green and blue image data are detected in each sub-frame, and the intensity of light incident on the liquid crystal panel 21 from the back-light 22 and the transmittance of the liquid crystal panel 21 are adjusted. More specifically, the transmittance of the liquid crystal panel 21 is adjusted so as to have maximum transmittance for the image data that requires the maximum amount of transmitted light in each of the red, green and blue sub-frames, and the intensity of incident light is reduced according to the adjustment result of the transmittance,” (specification, page 21, lines 14-24).

Applicants respectfully submit that Hong does not teach or suggest:

a transmittance adjusting unit for adjusting a transmittance of said display element, wherein

said transmittance adjusting unit adjusts a transmittance of maximum grayscale level among grayscale levels in a sub-frame corresponding to a color detected by said detecting unit, to be larger than said transmittance

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of maximum grayscale level at the time when said intensity of light incident on said display element becomes maximum,

said light control variable adjusting unit adjusts said intensity of light incident on said display element and said light control variable in said display element for each light of a color among said three colors, in accordance with said transmittance adjusted by said transmittance adjusting unit, and

the display is performed with said adjusted light control variable.

as recited in amended claim 1 and similarly recited in amended claim 14.

For at least the foregoing reasons, claims 1 and 14 are patentable over the cited references and claims 4-12 are patentable by virtue of their dependence from claim 1. Accordingly, withdrawal of the rejection of claims 1, 4-12 and 14 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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